



## Ohio Revised Code

### Section 1522.123 Documentation with hydrogeologic description.

Effective: October 17, 2019

Legislation: House Bill 166 - 133rd General Assembly

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An applicant shall include all of the following with the hydrogeologic description required under division (B) of section 1522.121 of the Revised Code:

(A) A detailed description of the geology within the proposed withdrawal and hydrologic study area down to the lowest level of any aquifer from which water is proposed to be withdrawn. The description must include the areal and structural geology of the withdrawal and hydrologic study area, and any other parameter that may affect the occurrence, availability, movement, or quantity of potentially affected ground waters. The description must be based on information available to the applicant from test borings, core drillings, well logs, and geologic literature and practices.

(B) Information related to the ground water hydrology for the proposed withdrawal and hydrologic study area including, at a minimum, all of the following:

(1) The elevation and the lateral extent of each aquifer, interbedded lithology, and overburden material;

(2) The thickness of each aquifer and a detailed lithologic description from surface to base of the deepest aquifer, noting any changes in lithology over distance;

(3) Known uses of and withdrawals from the water in each aquifer;

(4) The transmissivity of each aquifer;

(5) The storativity of each aquifer;

(6) The hydraulic conductivity of each aquifer;

(7) The specific yield of each unconfined aquifer;



(8) The rate of discharge of any currently registered water withdrawals shown pursuant to division (E) of section 1522.122 of the Revised Code;

(C) A listing of the published information and data, and copies of the unpublished records and data, used in preparation of the items in divisions (A) and (B) of this section including core descriptions, cuttings descriptions, stratigraphic descriptions, and pump or slug test records;

(D) A water supply inventory representing all aquifers submitted in a format prescribed by the chief of the division of water resources that, at a minimum, includes all of the following:

(1) All of the existing water wells within the study area if there are fewer than one hundred wells. If there are more than one hundred wells within the study area, the inventory must include one hundred wells plus twenty-five per cent of those wells in excess of one hundred, but shall not exceed a total of three hundred wells.

(2) A listing of water sources in the proposed withdrawal and hydrologic study area as shown pursuant to divisions (D) and (E) of section 1522.122 of the Revised Code. Such water sources must include the most recently drilled wells, represent all aquifers and producing zones within the aquifers, and reflect a uniform geographical distribution of wells within the study area. The listing must include, to the extent available, all of the following for each well:

(a) The map identification number listed under division (D) of section 1522.122 of the Revised Code;

(b) The department of natural resources, division of water resources number assigned to the log form required to be filed under section 1521.05 of the Revised Code;

(c) The township in which each well is located;

(d) The year the well was drilled;

(e) The latitude and longitude in NAD 83 of the well;



- (f) The surface elevation of the well in feet;
  - (g) The total depth of the well in feet below the land surface;
  - (h) The depth to bedrock in feet;
  - (i) A description of unconsolidated material;
  - (j) The static water level of the well in feet below the land surface;
  - (k) The casing length in feet;
  - (l) The lithology of the screen interval/open borehole;
  - (m) The length of any well screen in feet;
  - (n) The test rate in gallons per minute;
  - (o) The duration of the test;
  - (p) The drawdown in feet.
- (3) A listing of the location and type of any public water supply sources within the withdrawal and hydrologic study area;
- (4) A copy of the division of water resources well logs for the wells listed in division (D) of this section.

Prior to submission of an application, an applicant may submit a request in writing to the chief to reduce the number or extent of the submittals required in division (D) of this section. The chief may grant the request only if the chief makes a written determination that this reduction will not diminish the level of accuracy in the ground water model. If the chief grants a reduction, the written request



and determination shall be submitted with the permit application. If information required in the water supply inventory of division (D) of this section is unobtainable, a statement to that effect shall be submitted, giving the reasons therefor.

(E) A minimum of two perpendicular hydrogeologic cross sections of the same scale for the hydrologic study area based on available information. Such cross sections must be of uniform horizontal and uniform vertical scale, depict the information required in divisions (B)(1) and (2) of this section, intersect the center of the proposed withdrawal, and include the data points used to construct the cross section.

(F) Any other information the chief may require.

For purposes of the hydrogeologic description and to establish pre-pumping water level conditions, the chief may require the applicant to monitor water levels from each aquifer from which water is proposed to be withdrawn. The applicant shall conduct such monitoring via the wells listed in division (D) of this section or new monitoring wells drilled by the applicant. The chief also may require pre-pumping tests.